

Ochrosperma obovatum (Myrtaceae), a new species from south-eastern Queensland

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Summary

Bean, A.R. (1999). *Ochrosperma obovatum* (Myrtaceae), a new species from south-eastern Queensland. *Austrobaileya* 5(3): 499-501. A new species of *Ochrosperma* is described and illustrated, with notes on habitat and conservation status. A revised key to the species of *Ochrosperma* is provided.

Keywords: *Ochrosperma*, *Baeckea*, Myrtaceae, taxonomy, key, Australian flora

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Introduction

The genus *Ochrosperma* was established by Trudgen (1987). Some of its species were previously included under *Baeckea* L. It is characterised by a 3-locular ovary with 2 collateral ovules per loculus, reniform arillate seeds and few antesealous stamens (generally 5, but sometimes up to 8).

Continuing botanical exploration in south-eastern Queensland has revealed a new species of *Ochrosperma*, bringing the total number of species to six. *Ochrosperma* has an unusual phytogeography. *O. lineare* and *O. citriodorum* occur in coastal heathland of southern Queensland and northern New South Wales. *O. sulcatum* occurs on a sandstone cliff-face in the Northern Territory (Bean 1997). *O. adpressum* and *O. oligomerum* grow in heath or heathy woodland communities, the former in central Queensland and the latter in central New South Wales (Bean 1995). The new species also grows in heathland in inland parts of south-east Queensland. It forms a geographical link between the coastal species and the more inland *O. adpressum*.

Taxonomy

***Ochrosperma obovatum* A.R.Bean sp. nov.**
affinis *O. lineari* autem foliis obovatis
usque oblanceolatis, 1-1.8 mm latis

(linearibus, 0.5-1 mm latis in *O. lineari*),
floribus 3.5-4.5 mm diam. (2.5-3.5 mm
diam. in *O. lineari*), inflorescentibus 1-3-
floris (1- vel 2-floris in *O. lineari*) differt.

Typus: Queensland. BURNETT DISTRICT:
State Forest 132, c. 6 km ESE of Brovinia,
south of Mundubbera, 9 November 1997,
A.R. Bean 12564 (holo: BRI (1 sheet +
spirit); iso: CANB, MEL, NSW, PERTH).

Shrub 50-80 cm tall. Bark grey, scaly, persistent. Branchlets grey, terete, eglandular or sparsely glandular. Leaves overlapping, decussate; laminae obovate to oblanceolate, straight, plano-convex, 2.7-4.5 x 1.0-1.8 mm, margins entire, apex obtuse; oil glands small, rather obscure; petioles 0.4-0.7 mm long. Inflorescences axillary, 1-3-flowered; peduncles extremely short; pedicels 0.6-1.2 mm long; bracteoles 2, persistent to anthesis, broadly ovate, 0.7-0.8 x 0.3-0.6 mm, obtuse or acute, cymbiform. Hypanthium broadly campanulate, 1.5-1.8 mm long, 2.8-3.0 mm wide, surface smooth or muriculate, without ribs. Sepals lunate to semi-orbicular, translucent, 0.3-0.7 x 1.0-1.2 mm, with thickened midrib, margins entire or denticulate, oil glands present. Corolla white, 3.5-4.5 mm across; petals broadly obovate to orbicular, 0.9-1.3 x 1.2-1.8 mm, margins entire or minutely fimbriate, oil glands present. Stamens 5 (-6), antesealous; filaments slightly flattened, 0.6-0.8 mm long; anthers versatile, dorsifixed, c. 0.4 mm long, dehiscing by longitudinal slits; connective

gland dark brown to black, globular, in diameter about one-third the length of the anthers. Style terete, very short at anthesis, but reaching c. 0.8 mm long after anthesis; stigma capitate. Ovary 3-locular, ovules 2 per loculus, collateral. Fruit broadly campanulate, 1.4–1.8 x 3.0–3.4 mm, valves somewhat woody, conspicuous, not spreading widely on dehiscence. Seeds turgid, reniform, papillose, c. 1.5 mm long, pale yellow in colour, with a small white aril overlying the hilum. Fig. 1.

Additional specimens examined: Queensland. BURNETT DISTRICT: S.F. 132, c. 6 km ESE of Brovinia, Jun 1997, *Bean* 12044 (BRI, MEL, NSW). LEICHHARDT DISTRICT: just east of Planet Creek, "Planet Downs", E of Rolleston, Oct 1998, *Bean* 14219 (BRI).

Distribution and habitat: *O. obovatum* is known from two populations about 250 km apart. At the type locality, it occurs over an area of about 5 hectares, in a treeless heathland which has formed on a relictual Tertiary surface, heavily lateritised. The most common associated species are *Acacia julifera* Benth. subsp. *julifera*, *Triodia scariosa* N.T.Burb., *Babingtonia densifolia* (Sm.) F.Muell., *Hibbertia exutiacies* N.A.Wakef. and *Melaleuca thymifolia* Sm. The surface soil is sandy. Nearby trees include *Eucalyptus tenuipes* (Maiden & Blakely) Blakely & C.T.White and *E. watsoniana* F.Muell. subsp. *watsoniana*. At Planet Downs, it occurs in heathland on sandstone pavement with *Leptospermum sericatum* Lindl. and *Dodonaea*

spp. Altitude range is 320–360 metres.

Phenology: Poorly known; it probably flowers in response to rainfall.

Affinities: *Ochrosperma obovatum* differs from *O. lineare* by the obovate leaves 1–1.8 mm wide (linear, 0.5–1 mm wide in *O. lineare*), flowers 3.5–4.5 mm in diameter (2.5–3.5 mm diameter for *O. lineare*) and inflorescence often 3-flowered (1- or 2-flowered in *O. lineare*)

O. obovatum differs from *O. citriodorum* by the seeds c. 1.5 mm long (0.9–1.1 mm long for *O. citriodorum*), non-lemon scented leaves (lemon scented for *O. citriodorum*), and the 1–3-flowered inflorescences (1-flowered for *O. citriodorum*).

Conservation status: The recommended status is Vulnerable, using the IUCN Red List Categories (criterion D). There are two known populations. The type population comprises 250–500 plants. Part of the population lies within State Forest 132, while part lies on adjacent freehold or leasehold land. The only recent disturbance has been fence and track construction along the boundary of the State Forest. The second population comprises about 100 plants.

Etymology: The species epithet refers to the obovate leaf shape possessed by the species. This is in contrast to other *Ochrosperma* species occurring in Queensland.

Key to the species of *Ochrosperma*

1. Leaves obovate or elliptical, 2–3 times longer than wide 2
 Leaves linear to narrowly lanceolate, 5–12 times longer than wide 4
2. Leaves elliptical, 1.6–2.2 mm wide; petals 1.8–2.2 mm long **O. oligomerum**
 Leaves obovate, 0.8–1.8 mm wide; petals 0.8–1.3 mm long 3
3. Leaves lemon-scented; seeds 0.9–1.1 mm long **O. citriodorum**
 Leaves not lemon-scented; seeds c. 1.5 mm long **O. obovatum**
4. Stamens 6–8 per flower; fruits 3.3–4.0 mm wide; leaves markedly 4-ranked. . . **O. adpressum**
 Stamens 5 per flower; fruits 1.5–2.7 mm wide; leaves not markedly 4-ranked 4
5. Calyx lobes acuminate, rigid, 1.0–1.3 mm long **O. sulcatum**
 Calyx lobes obtuse, soft, 0.3–0.5 mm long **O. lineare**

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Fig 1. *Ochrosperma obovatum*. A. branchlet with inflorescence x 5. B. flower x 10. C. leaf x 10. D. fruit x 10. E. seed x 20, showing aril and minutely tuberculate surface. A-B, Bean 12564; C-E, Bean 12044.

